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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,354	06/27/2003	Stanley T. Crook	MSIBIS-0002USC2	2899

27180 7590 04/03/2008
ISIS PHARMACEUTICALS INC
1896 RUTHERFORD RD.
CARLSBAD, CA 92008

EXAMINER

LU, FRANK WEI MIN

ART UNIT	PAPER NUMBER
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1634

MAIL DATE	DELIVERY MODE
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04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/608,354	Applicant(s) CROOK ET AL.	
	Examiner FRANK W. LU	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 1/3/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38,39,95,97-99,101,103,104 and 109-112 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38,39,95,97-99,101,103,104 and 109-112 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/3/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> |

Continuation of Attachment(s) 6). Other: attached validation report for the sequencing listing.

DETAILED ACTION

CONTINUED EXAMINATION UNDER 37 CFR 1.114 AFTER FINAL REJECTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission of RCE and the amendment filed on January 3, 2008 have been entered. The claims pending in this application are claims 38, 39, 95, 97-99, 101, 103, 104, and 109-112. Rejection and/or objection not reiterated from the previous office action are hereby withdrawn in view of applicant's amendment filed on January 3, 2008.

Information Disclosure Statement

2. Some references in the information disclosure statement filed on January 18, 2005 (see sheets 11 and 12) are books. Since applicant did not submit these books in cases in 09/884,317, 09/260,310, 09/076,206, and this instant applicant, these references have not been considered. Note that applicant does not address this issue in the response filed on April 17, 2007 and January 3, 2008.

Specification

3. The disclosure is objected to because of the following informality: it is unclear that the word "which" in the phrase "the disclosure of which is incorporated herein by reference in its entirety" in the amendments related to lines 8 and 9 of page 1 of the specification (see page 2 of

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applicant's remarks) means U.S. Patent No. 6,428,956, U.S. Patent No. 6,329,146, and U.S. Provisional Application Serial. No. 60/076,534 or only means U.S. Provisional Application Serial. No. 60/076,534.

Appropriate correction is required.

Sequencing Listing

4. The computer readable form of the sequencing listing filed on April 17, 2007 has not been accepted by the office due to errors (see attached validation report for the sequencing listing). Please correct the errors and resubmit a computer readable form of the sequencing listing.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 38, 39, 95, 97-99, 101, 103, 104, and 109-112 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 111 recites the limitation "said combination" in step (d) of the claim. There is insufficient antecedent basis for this limitation in the claim because there is no word "combination" in step (c). Please clarify.

8. Claim 111 is rejected as vague and indefinite because, in view of step (f), it is unclear why whether binding of one or more members of said mixture of compounds to the nucleic acid

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target has occurred can be determined by comparing at least one mass to charge ratio obtained in step (e) to the known mass to charge ratio of the complex. Please clarify.

9. Claim 111 is rejected as vague and indefinite because, in view of step (g), it is unclear why the identity of said one or more members can be determined by calculating the mass of said one or more members. Please clarify.

10. Claim 111 is rejected as vague and indefinite because, in view of step (h), it is unclear why a relative dissociation constant for said member can be determined by comparing the ion abundance of said one or more members to the known ion abundance of the complex. Please clarify.

11. Claim 112 recites the limitation “said combination” in step (e) of the claim. There is insufficient antecedent basis for this limitation in the claim because there is no word “combination” in step (d). Please clarify.

12. Claim 112 is rejected as vague and indefinite because, in view of step (g), it is unclear why whether binding of one or more members of the mixture of compounds to the nucleic acid target has occurred can be determined by comparing the mass to charge ratio collected in steps (c) and (f). Please clarify.

13. Claim 112 is rejected as vague and indefinite because, in view of step (h), it is unclear why the identity of said one or more members can be determined by calculating the mass of said one or more members. Please clarify.

14. Claim 112 is rejected as vague and indefinite because, in view of step (i), it is unclear why a relative dissociation constant for said one or more members can be determined by

comparing the ion abundance of said one or more members to the ion abundance of said complex. Please clarify.

Conclusion

15. No claim is allowed.

16. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CAR § 1.6(d)). The CM Fax Center number is (571)273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Lu, Ph.D., whose telephone number is (571)272-0746. The examiner can normally be reached on Monday-Friday from 9 A.M. to 5 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, can be reached on (571)272-0735.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

/Frank W Lu /
Primary Examiner, Art Unit 1634
March 28, 2008